

AKROMID® A3 GF 30 1 S3 black (3502)

PA66-I GF30

AKROMID® A3 GF 30 1 S3 black (3502) is a 30% glass fiber reinforced, impact modified Polyamide 6.6. It is characterised by high stiffness and strength as well as a higher impact strength compared to a standard PA 6.6 GF 30. Furthermore, the material is heat stabilised and therefore perfectly suitable for connecting and fixing systems which are used at elevated temperatures in the automotive and electro industry.

heat stabilised 130 impact modified Properties Modulus Strength Impact 8.000 MPa 170 MPa 100 kJ/m²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min d.a.m.	8000 MPa
Tensile stress at break	5 mm/min d.a.m.	170 MPa
Tensile strain at break ISO 527-2	5 mm/min d.a.m.	4,5 %
Flexural modulus ISO 178	2 mm/min d.a.m.	8200 MPa
Flexural strength ISO 178	2 mm/min d.a.m.	270 MPa
Flexural strain at break ISO 178	2 mm/min d.a.m.	4,7 %
Charpy impact strength	23°C d.a.m.	100 kJ/m²
ISO 179-1/1eU	-30°C d.a.m.	110 kJ/m²



Charpy notched impact strength	23°C d.a.m.	17 kJ/m²
ISO 179-1/1eA	-30°C d.a.m.	12 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	245 °C
Melting temperature ISO 11357-3	DSC, 10K/min	262 °C

Flammability

Flammability UL 94	1,6 mm Wall thickness	HB Class
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+

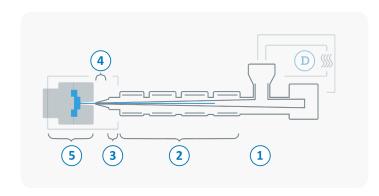
General Properties

Density ISO 1183	23°C	1,34 g/cm³
Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,7 - 0,9 %



Processing

The values mentioned are recommendations. We only recommend desiccant / dry air dryers or vacuum dryers. Too long a drying time and the resulting residual moisture content below the lower limit can lead to filling problems and surface defects. The specified drying time refers to closed and undamaged bagged material. When processing from previously opened bags or from octabins with polyolefin inliners, a longer drying time may be necessary. It is recommended to check the residual moisture content after the drying process.



D	Drying time	0 - 4 h
	Drying temperature (τ <= -30°C)	80 °C
	Processing moisture	0,02 - 0,1 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	260 - 300 °C
3	Nozzle temperature	270 - 310 °C
4	Melt temperature	280 - 300 °C
5	Mold temperature	80 - 100 °C
\bigcirc	Holding pressure, spec.	300 - 800 bar
	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min



Diagrams

